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Submitted for fo	ят 1449/РТО (	APR 0 2 2	mn 8	Application Number	10/689,982		
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INF	ORMATION	<b>DISCLO</b>	S <b>LOXE</b>	First Named Inventor	LaColla et al.		
STA	TEMENT BY	YXPPIM	XNT	Group Art Unit	1614		
				Examiner	Unassigned		
Sheet	1	of	3	Attorney Docket Number	06171.105003 IDX 1003 CON		

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				U.S. PATENT DOCUMENTS	•	
Examiner Initials *	Cite No.	U.S. Patent Docu Number Kind C		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pgs, Clmns, Lns, Where Relevant Passages/Relevant Figs Appear
1/13	AA	3,956,302	Α	Hunter et al.	: 05-11-1976	
IB	AB	5,747,500	A	Son et al.	1 05-05-1998	
M	AC	5,914,402	Α	Choi et al.	06-22-1999	<del>-</del>
iń	AD	5,998,411	A	Vig et al.	12-07-1999	· · · · · · · · · · · · · · · · · · ·
m	AE	6,117,904	A	Murphy et al.	09-12-2000	
1/2	AF	6,136,335	Α	Uckun et al.	10-24-2000	
10	AG	6,177,437	Bl	Wright	06-23-2001	
TY)	AH	6,376,504	BI	Uckun et al.	04-23-2002	
1/1	AI	2002/0193415	A1	LaColla et al.	12-19-2002	
7/1	AJ	6,545,007	Bl	Sommadossi et al.	04-08-2003	
7,7	AK	6,635,636	BI	LaColla et al.	10-21-2002	
Dai	AL	2003/0225114	Al	Sommadossi et al.	12-04-2003	

				FOR	REIGN PATENT DOCUMENTS .			
Examiner Initials *	Cite No.1	Fore Office <sup>3</sup>		ent Code <sup>z</sup> nown)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T 6
W	AM	EP	0,469,685	Al	Shell Int. Res. Maatsch., (Carter et al., Chem. Abstr., 116:194341)	02-05-1992		
M	AN	wo	91/18887	Al	Smith-Kline Beecham (Ife et al., Chem Abstr., 116:128961)	12-12-1991		
M	AO	wo	92/16201	Al	E.B. Michaels Res. Assoc. Inc.	09-12-2000		
W)'	AP	wo	95/18109 (PCT/KR94/00178)	Al	Korea Res. Inst. of Chem. Techn.	07-06-1995		
Ly	ĄQ	wo	97/43266 (PCT/KR97/00084)	Al	Korea Res. Inst. of Chem. Techn.	11-20-1997		
W	AR	wo	97/44342 (PCT/KR97/00074)	Al	Korea Res. Inst. of Chem. Techn.	11-27-1997		
W	AS	wo	00/03998	Al	Novirio Pharmaceuticals (Idenix)	01-27-2000		

Examiner Signature	V. Balisals amoning.	Date Considered	9/4/06
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Submitted for	form 1449/PTO			Application Number	10/689,982		
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	FORMATION			First Named Inventor	LaColla et al.		
ST	ATEMENT B	Y APPLI	CANT	Group Art Unit	1614		
				Examiner	Unassigned		
Sheet 2 of 3		Attorney Docket Number 06171.105003 IDX 1003 CON					
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OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, Examiner Cite serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published No. Initials \* BA AROYAN, A.A., et al., "Pyrimidine derivatives. Substituted 6-(4'-alkoxybenzyl)pyrimidines," Arm. Khim. Zh., 24(2):161-166 (1971), provided as Chem Abstr., 75:49022. BB ARTICO, M., "Non-Nucleoside Anti-HIV-1 Reverse Transcriptase Inhibitors (NNRTIs): A Chemical Survey From Lead Compounds to Selected Drugs for Clinical Trials," II Farmaco, 51:305-331 (1996). BC ARTICO,M.,et al.,"3,4-Dihydro-2-alkoxy-6-benzyl-4-oxopyrimidines (DABO's): A new class of specific inhibitors of human immunodeficiency virus Type 1," Antiviral Chem. Chemother., 4(6):361-368 (1993). BD BABA, M., et al., "Preclinical evaluation of MKC-442, a highly potent and specific inhibitor of human immunodeficiency virus type 1 in vitro," Antimicrobial Agents & Chemother., 38(4):688-692 (April 1994). BE BALZARINI, J. et al., "Human immunodeficiency virus type 1 drug-resistance patterns with different 1-[(2-hydroxyethoxy)methyl]-6-(phenylthio)thymine derivatives," Molecular Pharmacology, 44(4):694-701 (October 1993). BF BALZARINI, J. et al., "Marked inhibitory activity of non-nucleoside reverse transcriptase inhibitors against human immunodeficiency virus type 1 combined with (-)2',3'-dideoxy-3'-thiacytidine," Molecular Pharmacology, 49:882-890(1996). BG BOTTA, M., et al., "Synthesis, antimicrobial and antiviral activities of isotrimethoprim and some related derivatives," Eur. J. Med. Chem., 27:251-257 (1992). BROWN, T., et al., "Isocytosine H2-receptor histamine antagonists. !. Oxmetidine and related compounds," Eur. J. Med. Chem., 23(1):53-62 (1988), provided as Chem Abstr., 109:210995. RI COSTI, R., et al., "Structure-activity relationship studies on potential non-nucleoside DABO-like inhibitors of HIV-1 reverse transcriptase," Antiviral Chem. Chemother., 11(2):117-133 (2000). BJ FENNER, H. et al., "Pyrimido(5,4-B)quinolines," Arch. Pharm., 311(2):115-125 (1978) (Abstract only; W Chem Abstr., 88(21):152555q). BK LIU, X.Y., et al., "Synthesis and interferon-inducing activity studies on the antiviral compounds of 2,5,6trisubstituted-4(3H)-pyrimidine derivatives," Yaoxue Xuebao, 29(2):153-157 (1994), shown as Chem. Abstr., 121:108682. BL MAI, A., et al., "5-Alkyl-2-alkylthio-6-(2,6-dihalophenylmethyl)-3,4-dihydropyrimidin-4(3H)-ones," J. N Med. Chem., 42(4):619-627 (Bebruary 25, 1999). BM MAI, A., et al., "Dihydro(alkylthio)(naphthylmethyl)oxopyrimidines: novel non-nucleoside reverse transcriptase inhibitors of the S-DABO series," J. Med. Chem., 40(10):1447-1454 (May 9, 1997). BN MAI, A., et al., "Synthesis and anti-HIV-1 activity of thioanalogues of dihydroalkoxybenzyloxypyrimidines," J. Med. Chem., 38(17):3258-3262 (August 18, 1995). XP000578131. BO MASSA, S., et al., "Synthesis and antiviral activity of new 3,4-dihydro-2-alkoxy-6-benzyl-4oxopyrimidines," Antiviral Chem. Chemother., 6(1):1-8 (1995). [Chem. Abstr. 122(1):122513c (1995)].

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Sheet	3	of	3	Attorney Docket Number	06171.105003 IDX 1003 CON		

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Examiner	Cite	OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS  Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal,	T
Initials *	No.1	serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	•
M	CA	NIZI et al., "Solid phase synthesis of 2,6-disubstituted-4(3H)-pyrimidinones targeting HIV-1 reverse transcriptase," Tetrahedron Letters, 39:3307-3310 (1998).	
M	СВ	SBARDELLA, G., et al., "Does the 2-methylthiomethyl substituent really confer high anti-HIV-1 activity to S-DABOS?" Med. Chem. Res., 10(1):30-39 (2000).	
M	СС	SBARDELLA, G., et al., "Structure-activity relationship studies on new DABOS: effect of substitutions at pyrimidine C-5 and C-6 positions on anti-HIV-1 activity," Antiviral Chem. Chemother., 12(1):37-50 (January 2001).	
M	CD	TANAKA, H., et al., "Synthesis and antiviral activity of 6-benzyl analogs of 1-[(2-hydroxyethoxy)methyl]-6-(phenylthio)thymine (HEPT) as potent and selective anti-HIV-1 agents," J. Med. Chem., 38(15):2860-2865 (July 21, 1995).	
M	CE	TRAMONTANO, E., et al., "Characterization of the anti-HIV-1 activity of 3,4-dihydro-2-alkoxy-6-benzyl-4-oxopyrimidines (DABOs), new non-nucleoside reverse transcriptase inhibitors," Microbiologica, 17(4):269-279 (October 1994).	
M	CF	WAGLE, M.V., et al., "Tumor inhibitory studies on pyrimidines. 1. 2-Amino-4-hydroxy-5-(β-hydroxyethyl)-6-(alkyl or aryl)pyrimidines," <i>Proc. Indian Acad. Sci., Sect. B</i> , 70(1):9-14 (1969), provided as <i>Chem Abstr.</i> ,71:111298.	

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